# SETUP & OPERATION MANUAL

#### **FEATURES**

- Cast-iron frame & precision-balanced aluminum wheels with replaceable rubber tires.
- Sturdy, easy to assemble, closed base steel stand.
- Precision aluminum miter gauge with handle
- 2 cutting speeds for excellent results in either hard or soft woods.
- Hinged door and easily accessible blade tension knob, for fast blade changes or adjustments.
- Ball-bearing and carbon block blade guide assembly.
- Built-in blade cleaning brush keeps tires free of dust and chips.
- Safety lock-out switch with removable key to prevent unauthorized use.

#### **SPECIFICATIONS**

WHEEL SIZE 13 7/8 " (353 mm)

WHEEL SPEEDS (2) 470/820 RPM

MAXIMUM BLADE WIDTH 3/4" (19 mm)

MINIMUM BLADE WIDTH 1/4" (6 mm)

BLADE LENGTH

93 1/2" (2375 mm)

BLADE SPEEDS (2)

1630 & 2730 LIN. FPM (495/832 LIN. MPM)

**TABLE SIZE** 

16" x 16" (406 x 406 mm)

TABLE TILT

0°- 45° (RIGHT) / 0°-10° (LEFT)

<u>TABLE HEIGHT</u> 42" (1067 mm)

MAXIMUM WIDTH OF CUT 13 1/2" (343 mm)

MAXIMUM DEPTH OF CUT 6" (150 mm)

<u>DUST COLLECTION PORT</u> 2 1/2" (63 mm)

BASE DIMENSIONS (L x W) 19 5/8" x 13" (498 x 330 mm)

<u>MOTOR</u>

1 HP, 110 V, 1 PH, 10 A

**WEIGHT** 

191 LBS (87 kg)

## 14" WOOD CUTTING BANDSAW





#### **GENERAL® INTERNATIONAL**

8360 Champ-d'Eau, Montreal (Quebec) Canada H1P 1Y3 Telephone (514) 326-1161 • Fax (514) 326-5555 • www.general.ca

**THANK YOU** for choosing this General® International model 90-140 M1 14" Wood Cutting Bandsaw. This bandsaw has been carefully tested and inspected before shipment and if properly used and maintained, will provide you with years of reliable service. For your safety, as well as to ensure optimum performance and trouble-free operation, and to get the most from your investment, please take the time to read this manual before assembling, installing and operating the unit.

The manual's purpose is to familiarize you with the safe operation, basic function, and features of this bandsaw as well as the set-up, maintenance and identification of its parts and components. This manual is not intended as a substitute for formal woodworking instruction, nor to offer the user instruction in the craft of woodworking. If you are not sure about the safety of performing a certain operation or procedure, do not proceed until you can confirm, from knowledgeable and qualified sources, that it is safe to do so.

Once you've read through these instructions, keep this manual handy for future reference.

Disclaimer: The information and specifications in this manual pertain to the unit as it was supplied from the factory at the time of printing. Because we are committed to making constant improvements, General® International reserves the right to make changes to components, parts or features of this unit as deemed necessary, without prior notice and without obligation to install any such changes on previously delivered units. Reasonable care is taken at the factory to ensure that the specifications and information in this manual corres-

ponds with that of the unit with which it was supplied. However, special orders and "after factory" modifications may render some or all information in this manual inapplicable to your machine. Further, as several generations of this model of bandsaw and several versions of this manual may be in circulation, if you own an earlier or later version of this unit, this manual may not depict your machine exactly. If you have any doubts or questions contact your retailer or our support line with the model and serial number of your unit for clarification.

## GENERAL® & GENERAL® INTERNATIONAL WARRANTY

All component parts of General®, General® International and Excalibur by General International ® products are carefully inspected during all stages of production and each unit is thoroughly inspected upon completion of assembly.

#### **Limited Lifetime Warranty**

Because of our commitment to quality and customer satisfaction, General® and General® International agree to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser for the life of the tool. However, the Limited Lifetime Warranty does not cover any product used for professional or commercial production purposes nor for industrial or educational applications. Such cases are covered by our Standard 2-year Limited Warranty only. The Limited Lifetime Warranty is also subject to the "Conditions and Exceptions" as listed below.

#### **Standard 2-Year Limited Warranty**

All products not covered by our lifetime warranty including products used in commercial, industrial and educational applications are warranted for a period of 2 years (24 months) from the date of purchase. General® and General® International agree to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser during this 2-year warranty period, subject to the "conditions and exceptions" as listed below.

#### To file a Claim

To file a claim under our Standard 2-year Limited Warranty or under our Limited Lifetime Warranty, all defective parts, components or machinery must be returned freight or postage prepaid to General® International, or to a nearby distributor, repair center or other location designated by General® International. For further details call our service department at 1-888-949-1161 or your local distributor for assistance when filing your claim.

Along with the return of the product being claimed for warranty, a copy of the original proof of purchase and a "letter of claim" must be included (a warranty claim form can also be used and can be obtained, upon request, from General® International or an authorized distributor) clearly stating the model and serial number of the unit (if applicable) and including an explanation of the complaint or presumed defect in material or workmanship.

#### **CONDITIONS AND EXCEPTIONS:**

This coverage is extended to the original purchaser only. Prior warranty registration is not required but documented proof of purchase i.e. a copy of original sales invoice or receipt showing the date and location of the purchase as well as the purchase price paid, must be provided at the time of claim.

Warranty does not include failures, breakage or defects deemed after inspection by General® or General® International to have been directly or indirectly caused by or resulting from; improper use, or lack of or improper maintenance, misuse or abuse, negligence, accidents, damage in handling or transport, or normal wear and tear of any generally considered consumable parts or components.

Repairs made without the written consent of General® International will void all warranty.

# **TABLE OF CONTENTS**

Rules for safe operation	Blade clearance15
Electrical requirements	To remove a blade15
Electrical requirements	Blade selection16
Grounding instructions	To install a blade16
Circuit capacity6	Adjusting blade tension17
Extension cords6	Adjusting blade tracking18
Identification of main parts and	Adjusting the blade guard for depth of cut19
components7	Adjusting the upper guide blocks and
Unpacking8	thrust bearing19
List of contents	Positioning the lower guide blocks and thrust bearing20
Additional requirements for set up8	Changing speed settings
	Changing speed settings
Basic functions of the unit9	Operating instructions21
Placement within the shop / Establishing a	Checklist before starting
safety zone9	Connecting to a dust collector22
Placement within the shop9	Operations step-by-step22
Establishing a safety zone9	To stop the machine22
Clean un	Using the miter gauge22
Clean up9	Cutting curves23
Assembly instructions	Cutting circles23
Assemble the base cabinet10	Periodic Maintenance & Lubrication 23
Install the bandsaw onto the base cabinet11	Lubrification
Attaching the dust port11	Periodic maintenance
Attaching the table-tilt bracket11	
Attaching the table12	Required Maintenance
Miter gauge13	Replacing the bandsaw blade24
Power cord hooks13	Replacing the upper and lower thrust bearing .24
<b>Basic adjustments and controls</b>	Replacing the wheel tire
	Adjusting/replacing the lower wheel brush25
Connecting to a power source	Replacing lower wheel motor belt25
Power on/off switch with safety key13	Recommended optional accessoriess 26
Recommended adjustments	
Adjusting the 90° table stop and re-aligning the angle pointer14	Parts list & diagrams27-33
Tilting the table	
Removing/installing the blade15	

# Rules for Safe Operation

To help ensure safe operation, please take a moment to learn the machine's applications and limitations, as well as potential hazards. General® International disclaims any real or implied warranty and hold itself harmless for any injury that may result from the improper use of it's equipment.

- Do not operate the bandsaw when tired, distracted or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
- The working area should be well lit, clean and free of debris.
- Keep children and visitors at a safe distance when the bandsaw is in operation; do not permit them to operate the bandsaw.
- Childproof and tamper proof your shop and all machinery with locks, master electrical switches and switch keys, to prevent unauthorized or unsupervised use.
- Stay alert! Give your work your undivided attention. Even a momentary distraction can lead to serious injury.
- 6. Fine particulate dust is a carcinogen that can be hazardous to health. Work in a well-ventilated area and whenever possible use a dust collector. Wear face, eye, ear, respiratory and body protection devices.
- Do not wear loose clothing, gloves, bracelets, necklaces or other jewelry while the bandsaw is in operation.
- **8.** Be sure that adjusting wrenches, tools, drinks and other clutter are removed from the machine and/or the table surface before operating.
- Keep hands well away from the blade and all moving parts. Use a brush, not hands, to clear away chips and dust.
- **10.** Adjust and position upper and lower blade guides before starting to cut. Upper blade guide should be adjusted to approximately 1/8" above the material to be cut.
- Adjust blade tension and tracking before starting to cut.
- 12. Saw teeth must point down toward the table.
- **13.** Be sure that the blade has gained full operating speed before starting to cut.
- 14. Always use a clean, properly sharpened blade. Dirty or dull blades are unsafe and can lead to accidents.

- Use suitable workpiece support if the workpiece does not have a flat surface.
- 16. Hold material firmly against the table.
- 17. Do not work on long stock without adequate support on the out feed end of the table.
- **18.** If using a power feeder, stop the feeder before stopping the bandsaw.
- **19.** Do not push or force stock into the blade. The bandsaw will perform better and more safely when working at the rate for which it was designed.
- Avoid working from awkward or off balance positions. Do not overreach and keep both feet on floor.
- 21. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning be sure it is properly re-attached before using the tool again.
- **22.** Never leave the machine unattended while it is running or with the power on.
- 23. Use of parts and accessories NOT recommended by General® International may result in equipment malfunction or risk of injury.
- **24.** Never stand on machinery. Serious injury could result if the tool is tipped over or if the cutting tool is unintentionally contacted.
- 25. Always disconnect the machine from the power source before servicing or changing accessories such as blades, or before performing any maintenance or cleaning, or if the machine will be left unattended.
- **26.** Make sure that the switch is in the "OFF" position before plugging in the power cord.
- 27. Make sure the tool is properly grounded. If equipped with a 3-prong plug it should be used with a three-pole receptacle. Never remove the third prong.
- 28. Do not use this bandsaw for other than its intended use. If used for other purposes, General® International disclaims any real implied warranty and holds itself harmless for any injury, which may result from that use.



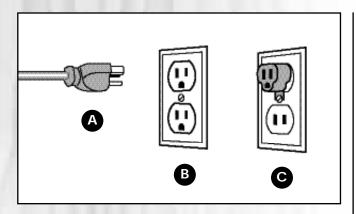
# **ELECTRICAL REQUIREMENTS**





BEFORE CONNECTING THE MACHINE TO THE POWER SOURCE, VERIFY THAT THE VOLTAGE OF YOUR POWER SUPPLY CORRESPONDS WITH THE VOLTAGE SPECIFIED ON THE MOTOR I.D. NAMEPLATE. A POWER SOURCE WITH GREATER VOLTAGE THAN NEEDED CAN RESULT IN SERIOUS INJURY TO THE USER AS WELL AS DAMAGE TO THE MACHINE. IF IN DOUBT, CONTACT A QUALIFIED ELECTRICIAN BEFORE CONNECTING TO THE POWER SOURCE.

THIS TOOL IS FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN WET OR DAMP LOCATIONS.



#### **GROUNDING INSTRUCTIONS**

In the event of an electrical malfunction or short circuit, grounding reduces the risk of electric shock. The motor of this machine is wired for 110V single phase operation and is equipped with a 3-conductor cord and a 3-prong grounding plug A to fit a grounded type receptacle B. Do not remove the 3rd prong (grounding pin) to make it fit into an old 2-hole wall socket or extension cord. If an adaptor plug is used C, it must be attached to the metal screw of the receptacle.

Note: The use of an adaptor plug is illegal in some areas. Check your local codes. If you have any doubts or if the supplied plug does not correspond to your electrical outlet, consult a qualified eletrician before proceeding.

#### **CIRCUIT CAPACITY**

Make sure that the wires in your circuit are capable of handling the amperage draw from your machine, as well as any other machines that could be operating on the same circuit. If you are unsure, consult a qualified electrician. If the circuit breaker trips or the fuse blows regularly, your machine may be operating on a circuit that is close to its amperage draw capacity. However, if an unusual amperage draw does not exist and a power failure still occurs, contact a qualified technician or our service department.

#### **EXTENSION CORDS**

If you find it necessary to use an extension cord with your machine, use only 3-wire extension cords that have 3-prong grounding plug and a matching 3-pole receptacle that accepts the tool's plug. Repair or replace a damaged extension cord or plug immediately.

Make sure the cord rating is suitable for the amperage listed on the motor I.D. plate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The accompanying chart shows the correct size extension cord to be used based on cord length and motor I.D. plate amp rating. If in doubt, use the next heavier gauge. The smaller the number, the heavier the gauge.

AMPERES EXTENSION CORD LENGTH				GTH
(AMPS)	25 FEET	50 FEET	100 FEET	150 FEET
< 5	18	16	16	14
6 TO 10	18	16	14	12
10 TO 12	16	16	14	14
12 TO 16	14	12	* NR	* NR

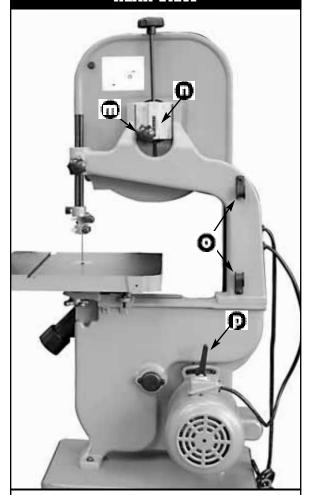
\* NR = Not Recommended

## **IDENTIFICATION OF MAIN PARTS AND COMPONENTS**

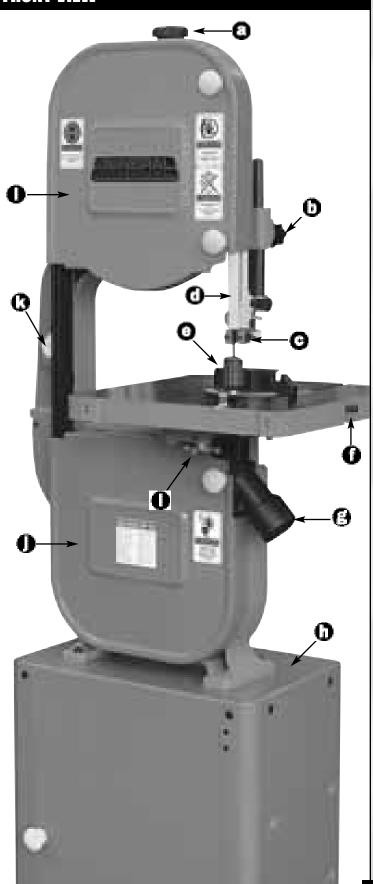
### **FRONT VIEW**

- BLADE TENSION ADJUSTMENT KNOB
- **1** BLADE GUARD LOCK KNOB
- **9** UPPER BLADE GUIDE ASSEMBLY
- BLADE GUARD
- MITER GAUGE
- TABLE ALIGNMENT PIN
- O DUST PORT
- **1** BASE CABINET
- **1** TABLE TILT LOCK KNOB
- LOWER WHEEL COVER DOOR
- ON/OFF SWITCH W/SAFETY KEY
- UPPER WHEEL COVER DOOR

### **REAR VIEW**



- BLADE TRACKING ADJUSTMENT KNOB
- BLADE TENSION INDICATOR
- POWER CORD STORAGE BRACKETS
- MOTOR PIVOT LOCKING LEVER



### **UNPACKING**

Carefully unpack and remove the unit and its components from its shipping container and check for missing or damaged items as per the list of contents below.

NOTE: Please report any damaged or missing items to your GENERAL® INTERNATIONAL distributor immediately.

### **LIST OF CONTENTS**

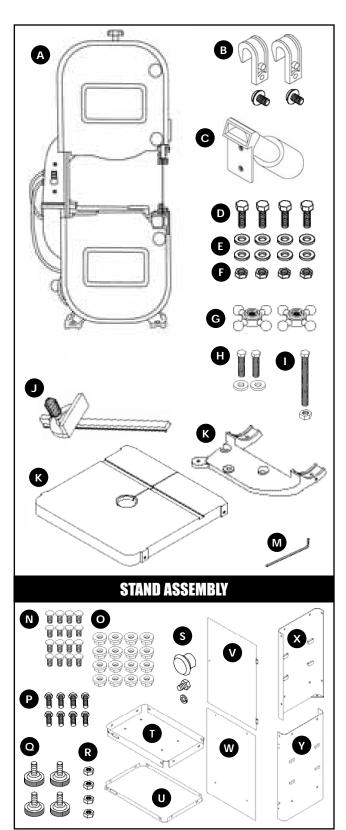
Once the parts have been removed from the packaging, you should have the following items:

		QTY
A-	BANDSAW	
B-	POWER CORD HOOK W/SCREW	2
C-	DUST PORT	
D-	HEX HEAD BOLT	4
E-	FLAT WASHER	8
F-	HEX NUT	4
G-	LOCK KNOB	2
H-	MEDIUM HEX HEAD HEAD BOLT W/FLAT WASHER	
I-	LONG HEX HEAD BOLT W/HEX NUT	´
J-	MITER GAUGE	'
K-	TABLE TILT BRACKET	
L-	TABLE	
M-	3 MM ALLEN KEY	
N-	CARRIAGE BOLT	
O-	FLANGE NUT	
P-	PHILLIPS HEAD SCREW	
Q-	LEVELING FOOT	
R-	HEX NUT	
S-	DOOR KNOB W/HEX BOLT AND FLAT WASHER	
T-	STAND TOP PLATE	
U-	STAND TOOL TRAY	
V-	STAND DOOR	
W-	STAND REAR PANEL	
X-	STAND LEFT SIDE PANEL	
Y-	STAND RIGHT SIDE PANEL	

#### ADDITIONAL REQUIREMENTS FOR SET UP

- Extra person for help with lifting
- Phillips screwdriver (regular and small)
- Flat head screwdriver
- 10 mm wrench and 10 mm Hex socket
- 12 mm wrench and 12 mm Hex socket
- 13mm wrench and 13 mm Hex socket
- 14 mm wrench and 14 mm Hex socket
- Feeler gauge set
- · Combination square





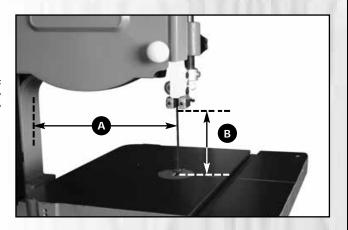
### **BASIC FUNCTIONS OF THE UNIT**

This 14" wood cutting bandsaw is supplied with a 3/8" wide general purpose blade and is designed to accommodate blade widths from 1/4" to 3/4". Ideal blade length for this 90-140 M1 model is 93 1/2" (2375 mm).

Note: Generally speaking, because the upper wheel height is somewhat adjustable (to allow for blade tensioning), a blade length variation of plus or minus 1/2" from the "ideal blade length" can be accommodated.

Maximum inboard width of cut (space between the blade and the body of the saw **A**) is 13 1/2".

For cutting thicker stock or for resawing, the maximum depth of cut **B** (or max. workpiece height) is 6" (up to 12" with optional "riser block kit" item #90-130A – Refer to section "Recommended Optional Accessories for your Bandsaw".



### PLACEMENT WITHIN THE SHOP / ESTABLISHING A SAFETY ZONE



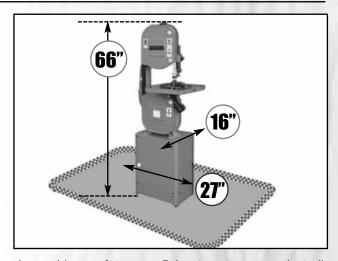
S MODEL 90-140 M1 BANDSAW IS HEAVY (191 LBS - 87 KG). DO NOT OVER-EXERT. THE HELP OF AN ASSISTANT .L BE NEEDED FOR THE FOLLOWING STEP.

#### PLACEMENT WITHIN THE SHOP

This machine should be installed and operated only on a solid, flat and stable floor that is able to support the weight of the bandsaw 191 LBS (87 kg) and the operator. Using the dimensions shown as a guideline, plan for placement within your shop that will allow the operator to work unencumbered and unobstructed by foot traffic (either passing shop visitors or other shop workers) or other tools or machinery.

#### **ESTABLISHING A SAFETY ZONE**

For shops with frequent visitors or multiple operators, it is advisable to establish a Safety Zone around shop machinery. A clearly defined "no-go" zone on the floor around each machine can help avoid accidents that could cause injury to either the operator or the shop visitor. It is advisable to take a few moments to either paint (using non-slip paint)



or using tape, define on the floor the limits or perimeter of each machines safety zone. Take steps to ensure that all operators and shop visitors are aware that these areas are off limits whenever a machine is running for everyone but the individual operating the unit.

### **CLEAN UP**

The protective coating on the saw table prevents rust from forming during shipping and storage. Remove it by rubbing with a rag dipped in kerosene, mineral sprits or paint thinner. (Dispose of potentially flammable solvent-soaked rags according to manufacturer's safety recommendations.)

A putty knife, held flat to avoid scratching the surface, may also be used to scrape off the coating followed by clean-up with solvent. Avoid rubbing the saw's painted surfaces, as many solvent-based products will remove paint.

To prevent rust, apply a light coating of paste wax or use regular applications of any after-market surface protectant or rust inhibitor.



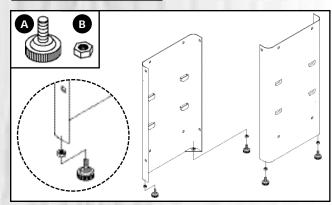
Tip: With a screw driver, push a solvent-saturated rag into the T-slot to remove the grease so the miter gauge will slide freely.

### **ASSEMBLY INSTRUCTIONS**

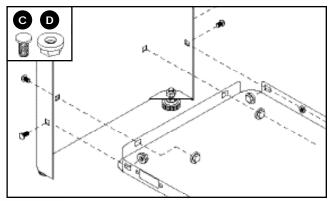


SERIOUS PERSONAL INJURY COULD OCCUR IF YOU CONNECT THE MACHINE TO THE POWER SOURCE BEFORE YOU HAVE COMPLETED THE INSTALLATION AND ASSEMBLY STEPS. DO NOT CONNECT THE MACHINE TO THE POWER SOURCE UNTIL INSTRUCTED TO DO SO.

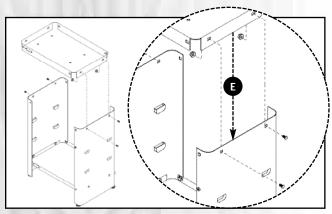
#### **ASSEMBLE THE BASE CABINET**



1. Thread a leveling foot **A** with a hex nut **B** on both side panels as shown above.

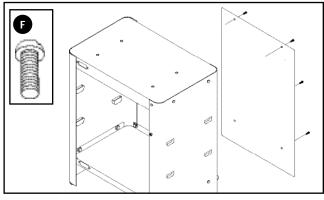


 Attach the left and right side panels to the tool tray using 8 carriage bolts C and flange nuts D, then tighten using a 12 mm open wrench.

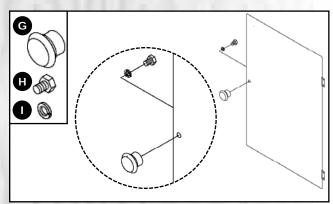


Attach the top plate to the left and right side panels using 4 carriage bolts C and flange nuts D as shown above.

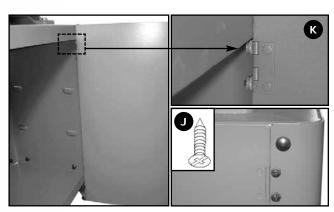
Note: The flanges of the top plate should fit inside the cabinet E.



4. Attach the rear panel to the top plate and tool tray using 4 Phillips head screws **F** as shown above.



5. Attach the door knob G to the door using the supplied hex head bolt H and lock washer I as shown above.



**6.** Attach the door to the hinges on the right side panel as shown using 4 Phillips head screws **J**.

Note: Hinges go behind side panel edge K.

#### **INSTALL THE BANDSAW ONTO THE BASE CABINET**

The bandsaw mounts onto a base cabinet which provides storage space for the miter gauge and replacement-blades

Important! Make sure all stand fasteners are firmly tightened and that the stand cabinet is installed on a solid, flat and stable floor that is able to support the weight of the bandsaw 191 LBS (87 kg)

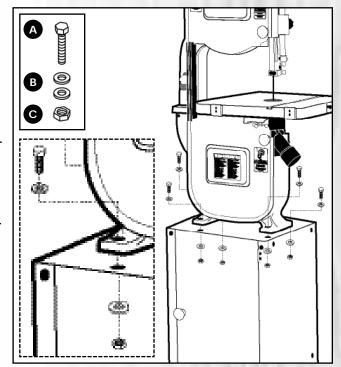


ne bandsaw is heavy. Do not over-exert. The help of n assistant will be needed for the following step.

Do not grip the bandsaw by the lower wheel cover door when lifting. Keep hands away from blade at all times

- Position the bandsaw over the four holes on top of the base cabinet.
- Using a 13 mm open end wrench and a 13 mm socket wrench, secure the bandsaw to the stand as shown using the 4 hex head bolts A, 8 flat washers B and 4 hex nuts C.

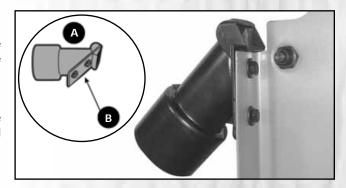
Note: The hex nuts must be tightened from inside the cabinet.



#### **ATTACHING THE DUST PORT**

The dust port **A** has a 2 –1/2" opening to accommodate connection to a dust collector (not included). Install the dust outlet on the right side of the bandsaw as follows:

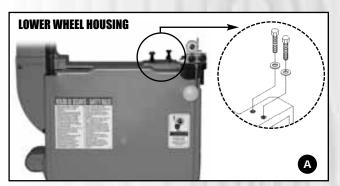
- 1. Open the lower wheel cover door.
- 2. Using a 10 mm wrench, attach the dust port to the edge of the door as shown using the hex bolts and washers **B** already attached to the dust port.

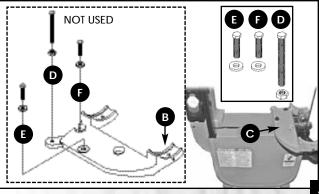


#### ATTACHING THE TABLE-TILT BRACKET

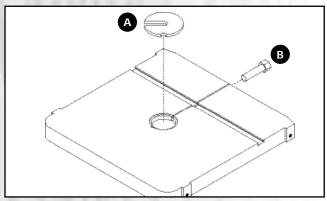
The work table mounts on a bracket which allows adjustment from flat (0°) to any angle up to 45° to the right. Adjustments can be made easily with the angle scale and lock knobs.

- Remove the two hex bolts and washers from the lower wheel housing A.
- Place the table-tilt bracket B on the lower wheel housing as shown in C and align holes to the threaded holes in the lower wheel housing (hole D is not used).
- Place washers on the two hex bolts E and F and insert the bolts through the table-tilt bracket holes and into the threaded holes in the lower wheel housing.
- **4.** Tighten <u>loosely</u>, using a 12 mm open end wrench and 12 mm socket wrench.
- Thread a nut onto the longer table-stop bolt D and screw the bolt into the hole on the rear tab of the table tilt bracket.
- \* Final tightening will be done after centering the table opening with the blade.

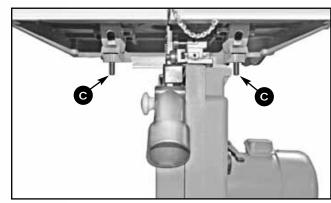




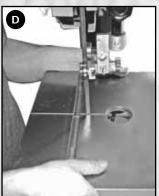
#### **ATTACHING THE TABLE**

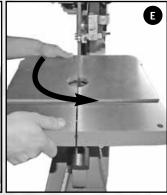


 Remove the red insert A from the center of the table and the table alignment pin B from the table slot.

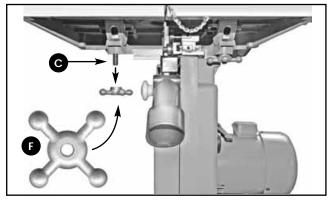


Turn the table right side up. Verify that the long bolts C in the center of each trunnion are pointing down the holes in the table-tilt bracket.





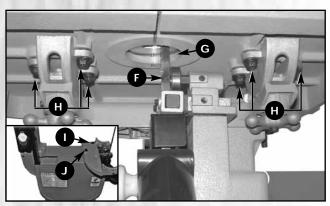
- Carefully move the table into position over the table-tilt bracket, guiding the saw blade through the table slot D.
- Rotate the table 1/4 turn counter-clockwise so that the saw blade is now perpendicular to the table slot E.



Gently lower the table onto the bracket so the long bolts C in the center of the trunnions pass through the holes in the table-tilt bracket.

Note: If the long bolts have moved out of position, have an assistant tap them into place with a screw driver.

**6.** Thread the two lock knobs **F** onto the long bolts now protruding from the underside of the tabletilt bracket and tighten loosely.



7. Make sure that the blade F is centered in the table opening G. If the blade is not centered, slide the table back or forward until the blade is centered in the table opening. Then tighten the six combination head bolts H using a 10 mm wrench and the two hex bolts I and J using a 12 mm open wrench and 12 mm socket wrench.

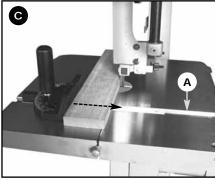




- **8.** Re-install the red insert to the center of the table, with the opening in the slot facing the rear of the saw **K**.
- Re-install the table alignment pin into the table slot L.

#### **MITER GAUGE**

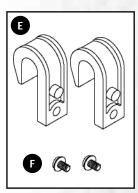


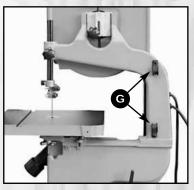


The miter gauge rides in the table slot to the right of the blade **A** and can be set to any angle up to 30° to the left or right **B**.

It also acts as a feeder for advancing smaller workpieces through the sawblade **C** with reduced risk of injury to the hands.

#### **POWER CORD HOOKS**





When the bandsaw is not in use, we recommend that the power cord be wound up neatly around the two hooks **E** provided . This keeps the power cord off of the floor and out of harms way.

Attach the hooks with the two Phillips head bolts  ${\bf F}$  to the threaded holes on the back of the upper arm of the bandsaw  ${\bf G}$ .

### **BASIC ADJUSTMENTS AND CONTROLS**

#### **CONNECTING TO A POWER SOURCE**

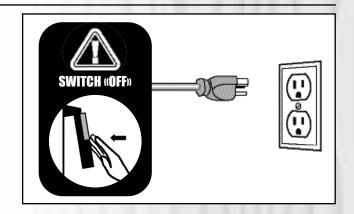


To avoid risk of shock or fire do not operate the unit with a damaged power cord or plug. Replace damaged cord or plug immediately.



To avoid unexpected or unintentional start-up, make sure that the power switch is in the the OFF position before connecting to a power source.

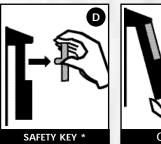
Uncoil the power cord A and plug it into an appropriate outlet (refer back to section "Electrical Requirements" and make sure all requirements and grounding instructions are followed).



#### **POWER ON/OFF SWITCH WITH SAFETY KEY**

The model 90-140 'M is equipped with a simple "rocker style" On/Off switch featuring a removable lock out safety key **D** to prevent unauthorized use or unintentional start-up of the bandsaw. Whenever the bandsaw is not in use, remove the yellow safety key and store it in a safe place, out of the reach of children.

- <u>To START the bandsaw</u>: Insert the safety key **D** and pull the switch toward you **E**.
- To STOP the bandsaw: Push the red tab down F.





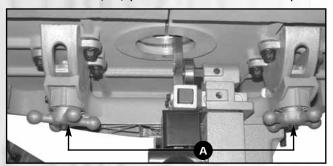


<sup>\*</sup> PREVENTS START-UP WHEN REMOVED

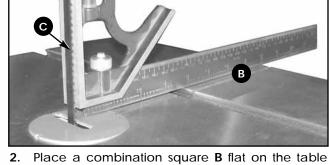
### **RECOMMENDED ADJUSTMENTS**

#### ADJUSTING THE 90° TABLE STOP AND RE-ALIGNING THE ANGLE POINTER

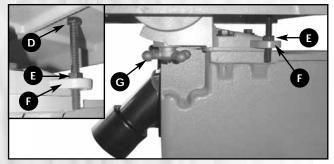
To ensure that your 90° cuts are square and that angled cuts are accurate with the angle indicator scale, the table default position must be set to 90° to the blade and the angle indicator pointer must be set to read 0 when the table is in the default (90°) position. To set the table-stop bolt:



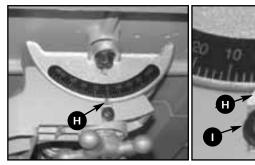
1. Loosen the two lock knobs A.



- Place a combination square B flat on the table with the heel of the square flat against the saw blade C.
- Level the table until it is exactly 90° to the blade, then tighten the lock knobs A.



- Adjust the height of the table-stop bolt until it touches the underside of the table D.
- 5. Turn the jam-nut E clockwise until it meets the table tilt-bracket F and tighten it.
- 6. Loosen the lock knobs **G** and make sure the table is resting on the table-stop bolt **D**.
- Check the square and make sure the table is still at 90° to the blade. If not, re-adjust the table-stop bolt.



- 3. With the table set to 90° and the stop bolt at the correct height, make sure the table tilt angle indicator pointer **H** is set to read 0°.
- 9. If the pointer needs to be adjusted, loosen the screw I on the pointer of the front trunnion and adjust the pointer H to the 0 point on the scale. Then re-tighten the screw to secure the pointer in place.

You will now be able to accurately return the table to the 90° position automatically without further adjustments and scale reading for any angle other than 0 will also be accurate.

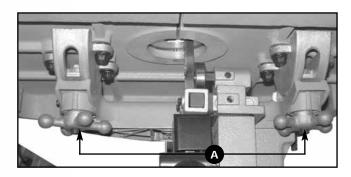
#### **TILTING THE TABLE**

The table can be tilted to any angle from 0° to 45° to the right, to allow for any type of bevel (or angle) cutting. Refer to the table tilt angle indicator to set the angle of the table to the desired position.



Never adjust the table angle while the bandsaw is running. Turn off power first.

- Loosen the two lock knobs A.
- 2. Tilt the table until it is at the desired angle. (Refer to the angle indicator under the bandsaw table.)
- 3. Tighten the lock knobs to lock the table in position.



#### **REMOVING / INSTALLING THE BLADE**

Your bandsaw is designed to handle several blade widths ranging from 1/4" and 3/8" used for tight radius curves, up to 1/2" and 3/4" for larger radius curves or for cutting thicker stock.

#### **BLADE CLEARANCE**

Note: When performing blade installation, removal, tensioning or tracking, maximum clearance between the blade and both upper and lower blade guide assemblies is required to minimize friction, which would be damaging to the blade.

Proceed as follows:

#### Move the upper guide blocks away from the blade:

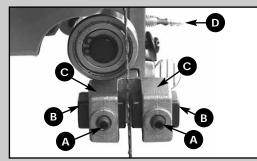
- Loosen the two set screws A using the supplied 3 mm Allen key.
- 2. Pull back the 2 upper guide blocks **B** in their mounting bracket **C**, as far away as possible from the blade.
- 3. Tighten the two set screws A to lock the guide blocks in position.

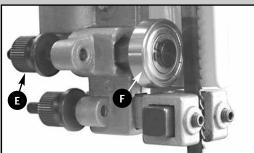
#### Move the upper thrust bearing back:

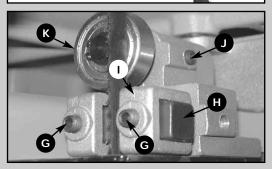
- 1. Loosen the upper thumb screw D.
- 2. Use the micro adjust nut E to move the thrust bearing F back as far as possible behind the blade.

#### Move the lower guide blocks / thrust bearing away from the blade:

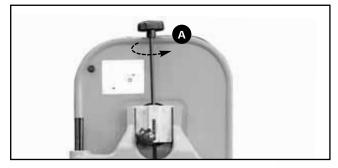
- Loosen the two set screws G using the supplied 3 mm Allen key.
- 2. Pull back the 2 lower guide blocks **H** in their mounting bracket **I**, as far away as possible from the blade.
- 3. Tighten the two set screws **G** to lock the guide blocks in position.
- 4. Loosen the upper set screw **J** using the supplied 3 mm Allen key.
- 5. Manually move the lower thrust bearing  ${\bf K}$  back as far as possible behind the blade.



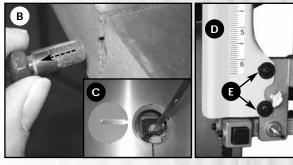




#### To remove a blade:



- 1. Turn off the bandsaw and unplug the power cord.
- 2. Turn the tension knob A counter-clockwise for the blade to be loose enough to remove easily.



- Remove the table alignment pin from the table slot B and the red circular insert C from the center of the table.
- Remove the right hand side blade guard D by loosening the two Phillips head screws E just enough to slide it out

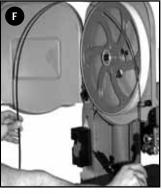


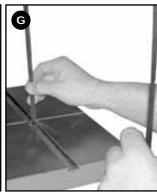
Blade teeth are sharp. Use care when handling a saw blade.

Open the top and bottom wheel cover doors and bring the left hand side of the loose blade toward you and out of the left hand blade guard slot F.

Note: You may want to use a thick shop towel to handle the loose blade or wear a pair of heavy duty work gloves.

- With the blade perpendicular to the wheels, feed the blade through the table slot to free it from the saw G.
- 7. Carefully hang the blade on a hook in a safe, dry place in your workshop if it will be re-used, or dispose of it safely if it is worn or damaged.







Do not attempt to coil up the blade as it was when you first purchased it as it has a tendancy to pop open unexpectedly and could cause injury.

#### **BLADE SELECTION**

There are a variety of different types of bandsaw blades on the market to suit various cutting applications. Your results may vary based on usage, experience and personal preference.

Standard size - 93 1/2" (2375 mm) - replacement blades made from high carbon steel can be purchased in a variety of widths from your General® International dealer under the following parts numbers:

- #90125-B14:1/4" 6 TPI, blade thickness: 0.65 mm
- #90125-B12: 1/2" 4 TPI, blade thickness: 0.65 mm
- #90125-B38: 3/8" 6 TPI, blade thickness: 0.50 mm
- #90125-B34: 3/4" 4 TPI, blade thickness: 0.65 mm

or (depending on availability) from your local tool dealer. These are standard sizes that should be readily available in most areas. The use of any other size is not recommended and can lead to serious injury and/or damage to the machine.

Some general guidelines to consider when choosing bandsaw blades:

- Wider blades with fewer teeth per inch are best suited to cutting straight lines, re-sawing and for sweeping curves, but will not turn tight radius curves. They will cut quickly and aggressively but do have a tendency to bind (or get stuck in the cut) if turned too sharply.
- •Narrower, thinner blades with more teeth per inch will cut more slowly but can turn much tighter corners for cutting more intricate work.

Common causes of blade breakage:

- Poor guide bearing alignment and adjustment.
- Forcing or twisting a wide blade around a short radius.
- Setting blade guard assembly too high above the workpiece.
   Too much blade tension.
- Lumpy or improperly finished braze or weld on the blade.
- Feeding the workpiece too quickly.
- · Dull teeth.
- Continuous running of blade when not cutting.

#### To install a blade:

Turn off the bandsaw and unplug the power cord.



Beware of the blade popping open.

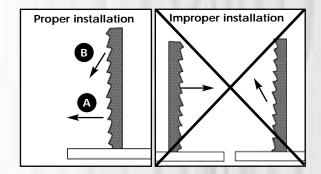
2. If you are installing a new blade, carefully remove the blade from its package. Hold it firmly with one hand as you remove the twist ties. Slowly separate the coils of the blade until it unravels into one hoop.



Note: Steps 3 and 4 may be unnecessary if you've just removed a blade. (If needed, refer back to the previous page.)

- 3. Remove the table alignment pin from the table slot and the red circular insert from the center of the table.
- 4. Remove the right hand side blade guard by loosening the two Phillips head screws, just enough to slide it out.
- 5. With the blade perpendicular to the wheels, guide it through the table slot, then rotate the side of the blade nearest you back toward the left side of the wheels.
- Feed the blade into the left blade guard and around the wheels. Make sure the blade teeth point forward A and down B.

With the blade properly installed, proceed to blade tension adjustments and blade tracking adjustments, as per instructions on the next few pages.



#### **ADJUSTING BLADE TENSION**

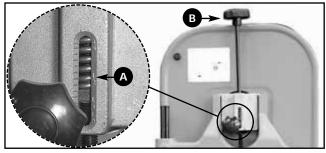
Determining ideal blade tension is somewhat subjective. It is learned through practice and experience and is somewhat dependant on personal preference and individual work habits.

A properly tensioned blade is critical to obtaining maximum performance from any bandsaw. A properly tensioned blade will last longer and be much less likely to break prematurely. If the blade tension is too loose you will notice that the blade will have a tendency to drift or slip off-line when cutting and you will have more difficulty controlling your cuts. A blade that is tensioned too tightly will break prematurely and will be difficult to work with when making tighter radius cuts.

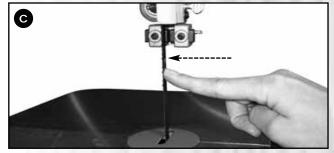
The following information can be used as a guideline or starting point to assist you in determining ideal blade tension for your needs:

- When working with wider blades, re-sawing taller stock, making straight cuts or wide sweeping curves tighter blade tensions will provide better results.
- When working with narrower blades, sawing shorter stock and making tighter curved cuts are best performed using less tension

This model 90-140 M1 bandsaw is equipped with a blade tension scale, which can be used as a reference for the ideal setting with various blade widths.



- Refering to the blade tension scale A, set the blade tension to correspond with the width of the blade installed on your bandsaw. Adjust the blade tensioning by turning the blade tension knob B:
  - a) Clockwise to tighten
  - b) Counter-clockwise to loosen the blade tension.



- 3. With the saw turned off, press against the side of the blade to test the tautness of the blade C. For ideal results with most blade widths and cutting applications the blade should flex in no more than 1/4" to 3/8".
- Make a test cut on a sample piece of wood and if needed re-adjust the blade tension

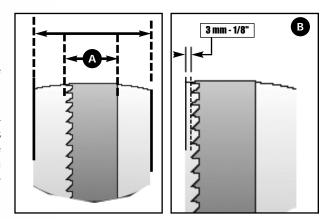
Note: To prolong the life of the blade whenever the bandsaw is not in use for prolonged periods (more than 24 hours), release the blade tension lever to remove tension from the blade, Over time, maintaining tension on a blade that is not in use will cause the blade to deform, by taking the shape of the wheels at both extremities. This can weaken the blade and cause premature breakage.

#### ADJUSTING BLADE TRACKING

Blade tracking means centering the blade on the wheels A.

Ideally, the blade should stay relatively centered on both the upper and lower wheels.

Due to natural variations in castings, blade thickness or density and tire wear, absolute perfect centering alignment is rarely attainable. A slight misalignment of the blade on the wheels is inevitable and as long as it is kept to a minimum (following the steps listed below) will not hinder the performance of the saw.



This misalignment is controlled and kept to a minimum by adjusting the tilt angle of the upper wheel.

When adjusting blade tracking to center the blade on the wheels and assuming that perfect centering is not attainable, it is preferable to have the blade slightly off-center towards the front of the wheels rather than towards the rear because the teeth on most bandsaw blades have alternating hook (one inner, one outer) – therefore if the blade is centered too far back on the wheel (or if the blade tension is too tight), inner hooked teeth will dig into the wheel tire and cause premature wear of the tire.

Nonetheless, to avoid having the blade come off of the wheels on it's own during operation, the front edge of the blades teeth should never be any closer than 3 mm (1/8") from the front edge of the wheel **B**.

#### **BLADE CLEARANCE**

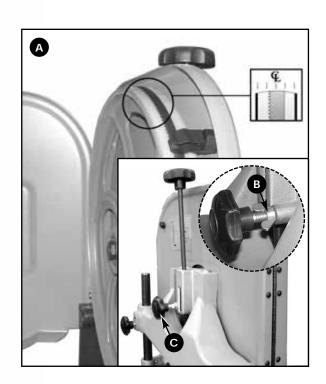
Note: As previously stated, when performing blade installation, removal, tensioning or tracking, maximum clearance between the blade and both upper and lower bearing assemblies is required to minimize friction, which would be damaging to the blade. Refer back and follow the instructions for "blade clearance" <u>before</u> performing blade tracking adjustments.

#### To adjust the blade tracking:

- Open the upper wheel cover door then rotate the wheel slowly forward by hand. The blade should remain as centered as possible on the wheel as it turns A.
- If the blade tracking must be adjusted, loosen thumb nut B, then turn the tracking knob C, located on the rear of the bandsaw:
  - a) Clockwise if the blade moves toward the front of the wheel. This tilts the top of the wheel to the back and moves the blade toward the center.
  - b) Counter-clockwise if the blade moves toward the back edge. This tilts the top of the wheel to the front and moves the blade toward the center.

Note: Turn the tracking knob in 1/2 turn increments, recheck and adjust again as needed.

3. Re-tighten thumb nut B



#### ADJUSTING THE BLADE GUARD FOR DEPTH OF CUT

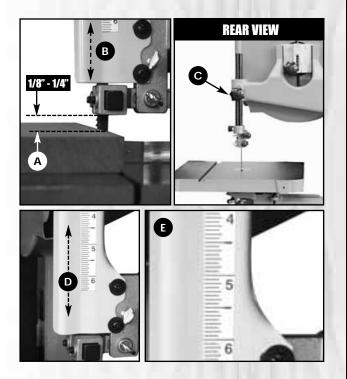
The blade guard can be moved up or down to accommodate the height of the work to be cut. To prevent the blade (which is flexible and which would not otherwise be supported) from slipping out of position during cutting, and to reduce risks of injuries, a minimum amount of blade should be exposed.

The blade guard should be set 1/8" - 1/4" above the workpiece A to prevent the blade from flexing out of position or off-line during cutting.

Adjust the height of the blade guard **B** to suit the thickness of the workpiece as follows:

- Make sure the bandsaw is turned off and the power cord is disconnected from the power source.
- 2. Loosen the smaller lock knob C.
- 3. Move the blade guide assembly up or down **D**, then re-tighten the lock knob **C**.

Note: The depth gauge E on the front of the blade guard can be used as a reference but it is not intended for high precision measurements.



#### **ADJUSTING THE UPPER GUIDES BLOCKS AND THRUST BEARING**

Note: Before adjusting the upper and lower blade guides and thrust bearings, make sure the blade is tensioned and tracking properly. Adjust the upper and lower blade guides and thrust bearings after each blade tension and tracking adjustment. Whenever the upper blade guide and thrust bearing are adjusted, the lower blade guide and thrust bearing should also be adjusted.

The blade guides blocks keep the blade from moving from side to side during cutting and must be snug but not touching the blade in order to ensure accurate cuts. The space between each block and the blade must not exceed 0.02" (the thickness of a sheet of paper). If less space is left, the blade will get stuck or jammed between both blocks. Too much friction will cause blade to overheat and break. Also, the guide blocks must remain at least 1/32" behind the blade teeth to prevent damage to the blade.

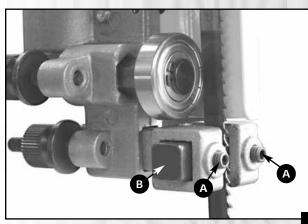
The thrust bearing keeps the blade from moving back and out of position when the work is being fed into the blade and must be very close to the back of the blade to prevent damage to the blade during cutting.

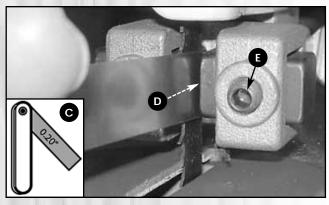
Adjust the positioning of the upper blade guides blocks:



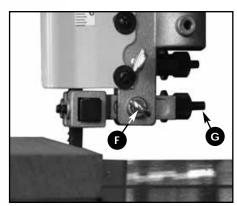
To avoid injury, make sure that the switch is in the "OFF" position and that the power cord is unplugged before performing any adjustments on the bandsaw.

- Loosen the two set screws A using the supplied 3 mm Allen key.
- **2.** Push the guide blocks **B** towards the blade.





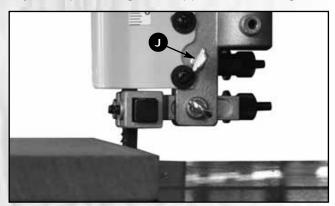
- Pinch a feeler gauge C between one of the guide blocks and the blade D, and then tighten the set screw E to set the gap between the guide block and the blade.
- Repeat step 3 for the other guide block on the other side of the blade.



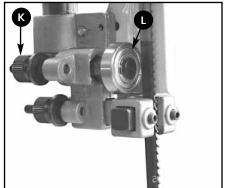


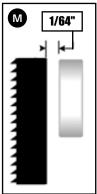
- 5. Loosen the lower thumb screw F.
- 6. Turn the micro lower adjust nut G to move the guide block assembly in or out until the guide blocks are at least 1/32" behind the blade teeth H. The guide blocks must remain behind the blade teeth to prevent damage to the blade.
- 7. Tighten the thumb screw F to lock the guide block assembly in position.

#### Adjust the positioning of the upper thrust bearing:



Loosen the upper thumb screw J.



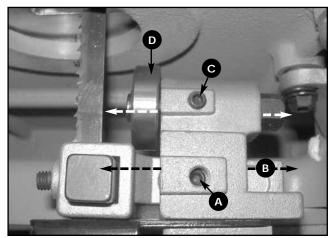


Turn the micro adjust nut K to move the thrust bearing L in or out until the bearing is 1/64" behind the back edge of the blade M, then tighten the upper thumb screw J.

#### **POSITIONING THE LOWER GUIDE BLOCKS AND THRUST BEARING**

The lower blade guide blocks and thrust bearing perform the same function as the upper blade guide blocks and thrust bearing except they do so after the blade has contacted the stock being cut.

- 1. Repeat steps 1 to 4 of section "Adjust the positioning of the upper blade guides blocks" with the lower blade guide blocks.
- Loosen the lower set screw A using the supplied 3 mm Allen key.
- Manually move the guide block assembly in or out B until the guide blocks are at least 1/32" behind the blade teeth.
- Tighten the lower set screw A to lock the guide block assembly in position.
- 5. Loosen the upper set screw C.
- 6. Manually move the thrust bearing **D** in or out until the bearing is 1/64" behind the back edge of the blade, then tighten the upper set screw **C**.



#### **CHANGING SPEED SETTINGS**

This model 90-140 14" wood cutting bandsaw has 2 different speed settings; low and high.

- Low speed is to be used for cutting soft woods over 4" in height or hard woods over 2" in height.
- High speed is best for cutting soft woods under 4" in height or hard woods under 2" in height.

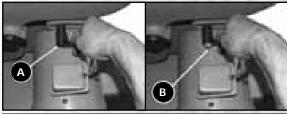
Note: If wood starts to burn at high speed, stop and change to the lower speed setting.

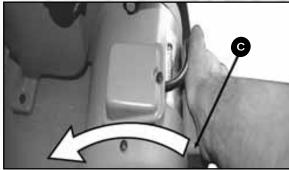
#### To change the speed setting:

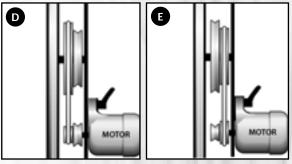
- 1. Turn off power and disconnect the bandsaw from the power source to avoid unintentional start-up of the bandsaw.
- 2. Open the lower wheel cover door.
- 3. At the back of the bandsaw, just above the motor, there is a ratchet lever **A** for loosening the tension on the drive belt. When you pull it out, as in **A**, it disengages for resetting. When you release it as in **B**, it engages the bolt for screwing or unscrewing. (You can tell when it is engaged by the orange indicater button **B** showing).

To loosen the drive belt, unscrew the bolt a few turns counterclockwise then pull up on the capacitor cover of the motor **C** pivot the motor to the left. This loosens the belt enough to move it between one set of pulleys and the other.

- To set the bandsaw speed to the slower setting; 1630 FPM (495MPM), place the belt on the frontmost set of pulleys as in D.
- To set the bandsaw speed to the faster setting; 2730 FPM (832MPM), place the belt on the rearmost set of pulleys as in E.
- 6. Having repositioned the belt, push down firmly on the motor capacitor cover to tighten the belt, then turn the ratchet lever clockwise until it is tight and the motor does not move.







### **OPERATING INSTRUCTIONS**

#### **CHECKLIST BEFORE STARTING**

NOTE: Now that you have completed the four adjustment steps which are an essential part of safe, accurate bandsaw operation, it would be a good idea to make yourself a checklist as follows to ensure that each adjustment to the bandsaw is made in the proper order starting with the general safety precaution:

- 1. Turn off the bandsaw and unplug the power cord.
- 2. Adjust blade tension.
- 3. Adjust blade tracking.
- 4. Adjust upper blade guides and thrust bearing.
- 5. Adjust lower blade guides and thrust bearing.

These additional safety measures should be be included in your checklist:

- 6. Make sure all the blade guards are in place.
- 7. Make sure the bandsaw table and work area in general are clean and free of sawdust and debris.

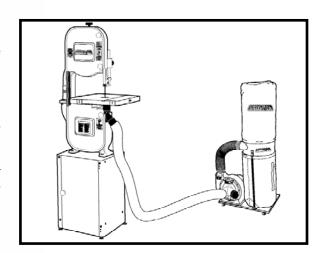
These steps should always be followed when any adjustment is performed, the blade is changed, or periodically as vibration and normal wear and tear on the machine could throw these parts out of alignment.

#### **CONNECTING TO A DUST COLLECTOR**

A dust port with a 2.5" opening is provided to accommodate connection to a dust collector (not included).

Once the dust port has been installed (See Previous section "Attaching the dust port"), be sure to use appropriate sized hose and fittings (not included) and check that all connections are sealed tightly to help minimize airborne dust.

If you do not already own a dust collection system consider contacting your General® International distributor for information on our complete line of dust collection systems and accessories or visit our Web Site at: www.general.ca.



#### **OPERATIONS STEP-BY-STEP**



To reduce the risk of damage to the bandsaw or the workpiece, as well as a potential for personal injury, after initial set-up as well as before each use, make sure that everything is securely installed and that all fasteners and moving parts on this bandsaw are locked in place before starting the machine.

- 1. Trace the cutting line on your workpiece with a pencil.
- 2. Set the height of the blade guard according to the thickness of your workpiece (see section: "Adjusting the blade guard for depth of cut" on page 19.)
- 3. If a dust collector is connected to your bandsaw, turn it on.



Make sure to have on safety glasses at all times when using the bandsaw.

Make sure you are wearing safe appropriate workshop attire. Roll up long sleeves, secure long hair and remove any jewelry: watches, rings, bracelets or anything that could get stuck into the moving parts of the bandsaw, potentially causing serious injuries.

4. Pull the switch toward you to start the bandsaw.

Note: The yellow safety key must first be inserted into the switch.

5. Align the cutting line on your workpiece with the blade and feed the workpiece into the blade.

Tip: The use of a roller stand provides an extra support for more convenience when working with longer workpieces.

#### TO STOP THE MACHINE

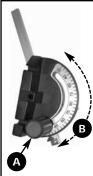
- 1. Push the red tab down and remove the yellow key.
- 2. Turn your dust collector off.

#### **USING THE MITER GAUGE**

The miter gauge allows for easier and safer sawing by providing workpiece support when cutting straight (90°) or angled ends (0° to 30°). The miter gauge supplied with your bandsaw is adjustable from 0° to 30° right to left.

To use a setting other than  $90^{\circ}$ , loosen the lock knob **A** by turning it counter-clockwise. Rotate the miter head to the required angle **B**, shown on the angle indicator. Then turn the lock knob **A** clockwise to tighten it.



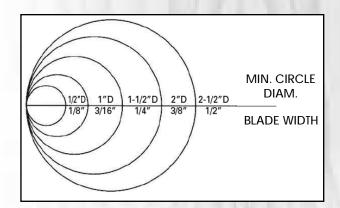


#### **CUTTING CURVES**

- When cutting curves, carefully turn the workpiece so the blade follows without twisting. If the curve is so sharp that
  you repeatedly back up and cut new kerf, use a narrower blade, or a blade with more set (teeth further apart).
   When a blade has more set, the workpiece turns easier but the cut is rougher.
- When changing a cut, do not withdraw the workpiece from the blade. The blade may get drawn off the wheels.
- To change a cut, turn the workpiece and cut your way out through the waste material area.
- When cutting long curves, make relief cuts as you go along.

#### **CUTTING CIRCLES**

- 1. Adjust the blade guard assembly to 1/8" above the workpiece.
- Use both hands while feeding the work into the blade. Hold the workpiece firmly against the table. Use gentle pressure. Do not force the work. Allow the blade to cut.
- The smallest diameter circle that can be cut is determined by the width of the blade. For example, a 1/4" wide blade will cut a minimum diameter of approximately 1-1/2".



### PERIODIC MAINTENANCE & LUBRICATION

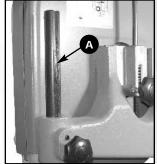


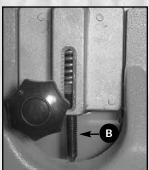
Disconnect machine from power source, before performing any lubrication or maintenance.

#### **LUBRICATION**

Keep the rack and pinion **A** as well as the blade tension adjustment screw **B** well greased and free of dust or debris. Clean and remove dust, debris, and old grease after every 10-15 hours of use. After cleaning, reapply grease as needed. (Use any all purpose grease.)

The motor and all bearings are sealed and permanently lubricated – no further lubrication is required. No other part of this bandsaw needs lubrication.





#### PERIODIC MAINTENANCE



Never operate the bandsaw with any damaged part. Replace a damaged part at the first visible signs of damage.

- 1. Inspect/test the ON/OFF switch before each use. Do not operate the bandsaw with a damaged switch; replace a damaged switch immediately.
- 2. Periodically inspect the power cord/plug and the blade for damage.



To avoid eye injury from blowing debris, wear safety goggles when blowing out sawdust.

3. Keep the machine clean and free of sawdust. Frequently blow out or vacuum up the sawdust and wipe down the machine occasionally with a damp rag.

Note: The wheels must always be kept clean. Dirt on the wheels will cause blade slippage.

4. Do not allow dirt, pitch or gum to build up on the table, blade, guide/thrust bearings. Clean as needed with gum and pitch remover.

Note: Do not immerse the bearings in the gum and pitch remover.

To prevent rust from forming on the unpainted cast iron of the table, and so that the wood slides easily while cutting, apply a light coating of paste wax or use regular applications of any after-market surface protectant or rust inhibitor.

### **REQUIRED MAINTENANCE**

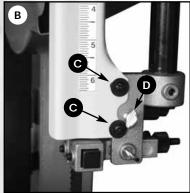
#### REPLACING THE BANDSAW BLADE

The blade should be replaced when worn out. Refer to the following symptoms to determine whether or not it is time to replace the blade:

- It is not cutting as fast.
- It is not able to follow a cutting line as it used to.

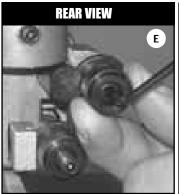
#### REPLACING THE UPPER AND LOWER THRUST BEARINGS

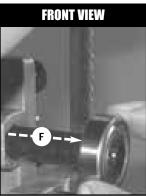




- Turn the tension knob A counter-clockwise for the blade to be loose enough to remove easily.
- Remove the right hand side blade guard B by loosening the two phillips head screws C, just enough to slide it out.
- 3. Loosen the upper thumb screw D.
- Use C-ring pliers G to remove the "C ring" H and slide the bearing off the shaft I.
- 7. Install a new bearing on the mounting shaft
- Re-install the C-ring.
- Put the bearing and mounting shaft back in place, re-install the Allen bolt and tighten the upper thumb screw.
- 10. Re-install the blade-guard.

Note: After the upper thrust bearing have been changed, always verify the lower thrust bearing. If needed, replace it proceeding in the same way as with the upper thrust bearing.

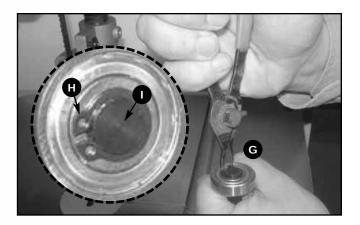




 Unscrew the upper Allen bolt using the supplied 3 mm Allen key E.

Note: Hold the micro adjust nut while unscrewing the Allen bolt, E.

5. Remove the thrust bearing and mounting shaft F.

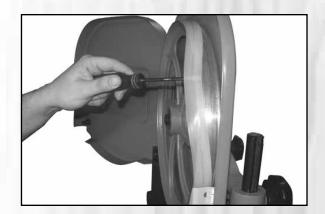


#### REPLACING THE WHEEL TIRE

Wheel tires must be replaced if they get worn out or damaged. (If it is worn out, the blade will not track straight on the wheels.)

Use a flat screwdriver to remove the tire from the groove on the wheel, then install a new tire.

Note: When replacing the tires, stretch them around the wheels but do not glue them on.



#### ADJUSTING/REPLACING THE LOWER WHEEL BRUSH

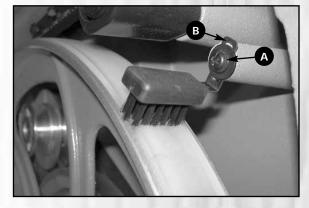
The lower wheel is equipped with a cleaning brush that prevents pitch and sawdust build up on the lower tire.

Any pitch and sawdust that builds up on the upper wheel tire should be removed with a stiff brush or scraped off with a piece of wood.

Note: To avoid damaging the tire do not use a sharp knife or any kind of solvent to remove pitch build up.

Verify that the brush keeps the lower wheel surface clean at all times. With use and normal wear over time, the brush hairs will soften and will not clean the surface of the wheel as well. You then must lower the brush slightly. Proceed as follows:

- 1. Loosen the Phillips head screw A.
- Slide the brush slightly down along the mounting holeB of it's mounting bracket, so that a fresh, stiffer part of the hairs touches the wheel tire.
- 3. Tighten the screw to lock the brush in position.



#### **REPLACING LOWER WHEEL MOTOR BELT**

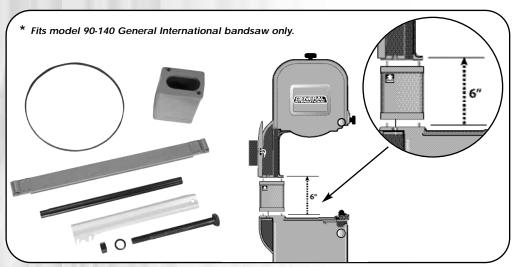
The lower wheel is driven by one belt mounted on either of the two pulleys powered by the motor. The belt's tension should be verified upon reception of the machine, then every 6 months. Slightly push on the belt with your finger. The belt must not move more than 1/8". If the belt becomes too loose due to wear or if a breakage occurs, you must replace it.

- 1. Turn off power and disconnect the bandsaw from the power source to avoid unintentional start-up.
- 2. Open the lower wheel cover door.
- 3. If needed, loosen the belt, proceeding as per step 3 in section "Changing speed settings", on page 21.
- 4. Remove the belt from the groove in the pulleys and install a new one.
- 5. Having installed a new belt, push down firmly on the motor capacitor cover to tighten the belt, then turn the ratchet lever clockwise until it is tight and the motor does not move.
- 6. Close the lower wheel cover door.

### RECOMMENDED OPTIONAL ACCESSORIES

We offer a large variety of products to help you increase convenience, productivity, accuracy and safety when using your bandsaw Here's a small sampling of optional accessories available from your local General International dealer.

For more information about our products, please visit our website at www.general.ca





#### Riser Block Kit\* #90-130A

Increases the vertical cutting capacity of your saw from 6 to 12 inches for increased re-sawing versatility. Kit includes all necessary hardware and a longer 3/8" wide blade to fit the increased height of the saw.



#### **Blades**

#90125-B14

1/4" - 6 TPI, blade thickness: 0.65 mm

#90125-B38

3/8" - 6 TPI, blade thickness: 0.50 mm

#90125-B12

1/2" - 4 TPI, blade thickness: 0.65 mm

#90125-B34

3/4" - 4 TPI, blade thickness: 0.65 mm



#### Roller Stand item #50-150 item #50-160 item #50-170

We offer a selection of roller stands to suit all your shop needs.



#### 24" X 24" Bandsaw Table #90-115

Quick clamping system for easy installation without damaging original table. Includes 2 1/2" "T" style ripfence and rails and a curved resaw attachment.



#### Mobile Base #50-025

Easily roll your bandsaw anywhere in your shop. Load capacity: 500 LBS. Wheels lock when equipment is in use.



#### <u>Universal Bandsaw Rip</u> <u>Fence System</u> item #90-075A

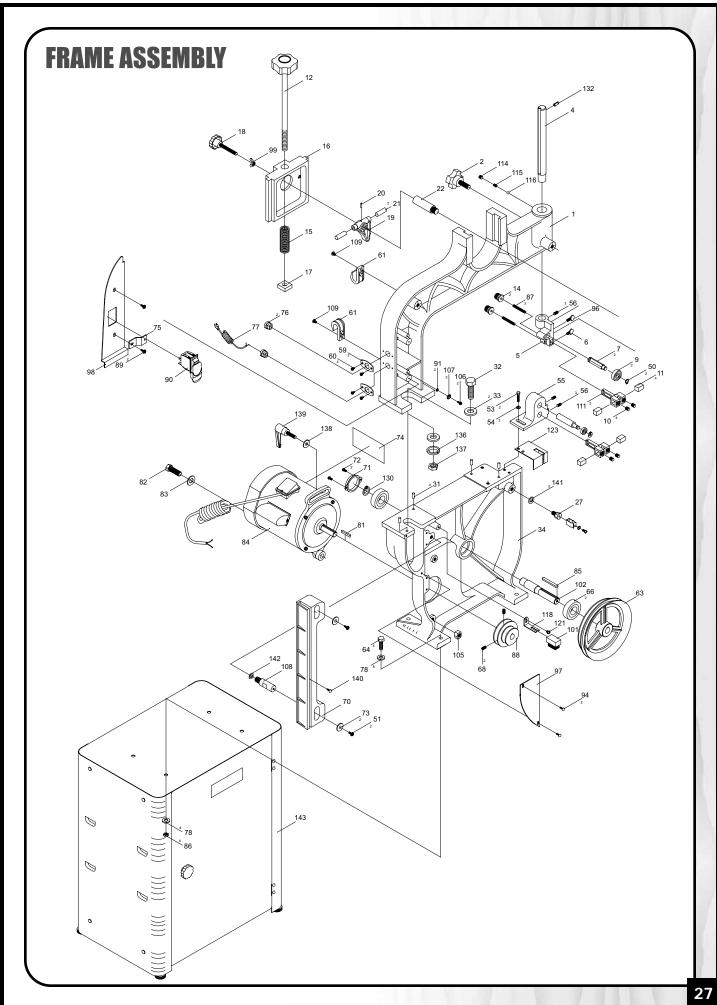
21" Fence & 25" Rails.

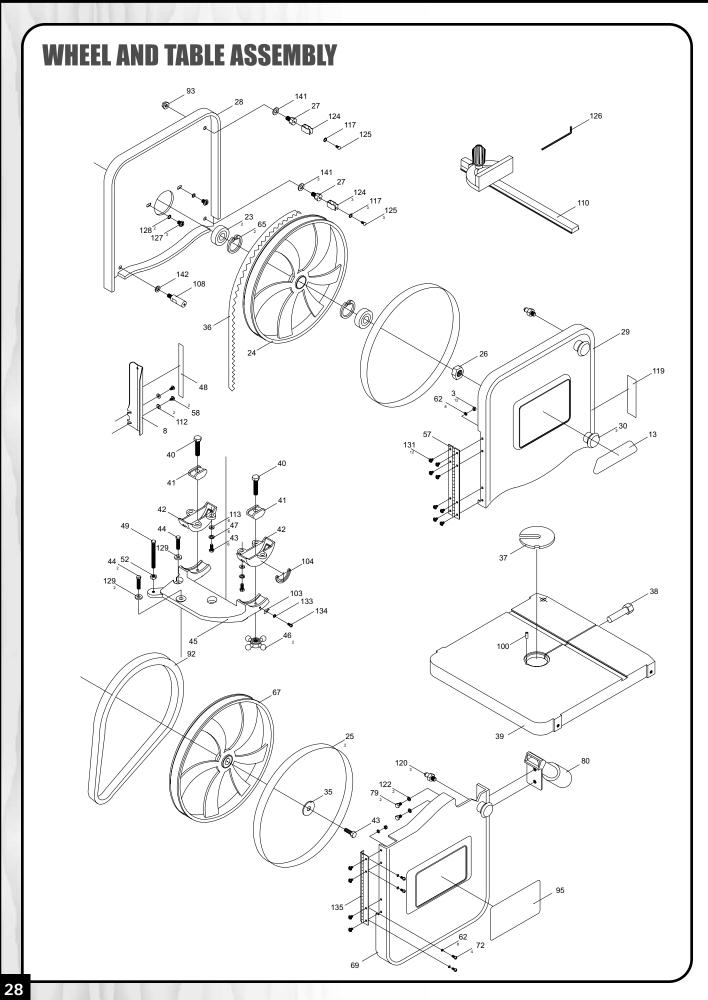
Complete bandsaw fence system includes fence, rails and 3 1/2" resaw guide.



## <u>Dust Collectors and</u> accessories

We offer a wide selection of dust collectors and accessories to suit virtually all your shop needs. Dust collectors contribute to a cleaner healthier workshop environment.





### PARTS LIST 90-140 M1

REF #	PART. NO.	DESCRIPTION	SPECIFICATION	QTY
1	90140-01	UPPER FRAME	WA-14CD	1
2	90125-50	UPPER BLADE GUIDE LOCK KNOB	5/16" X 1-1/4"	1
3	90125-46	HEX. NUT	3/16"	12
4	90140-02	GUIDE POST (V TYPE)		1
5	90125-54	UPPER BLADE GUIDE HOLDER	WA-14	1
6	90125-123	THUMB SCREW	M6 X 10L	1
7	90125-56	BEARING SHAFT	WA-14C	2
8	90125-65	BLADE GUARD	BS3550PC	1
9	90125-57	THRUST BEARING	#6200ZZ	2
10	90125-55	SET SCREW	M6 X 10L	4
11	90140-03	GUIDE BLOCK	WA-14	4
12	90140-04	BLADE TENSION ADJUSTMENT KNOB	SK-62 X M8 & 320L	1
13	90125-48	LOGO PLATE	175 X 124	1
14	90125-64	MICRO ADJUSTING NUT	M6	2
15	90125-24	SPRING	WA-14	1
16	90125-19	TENSIONING COVER	WA-14	1
17	90125-25	SQUARE NUT	3/8"(WA-14)	1
18	90125-30	BLADE TRACKING KNOB	5/16" X 2"L	1
19	90125-20	TENSIONING CAM	WA-14	1
20	90125-22	SPRING PIN	Ø3 X 30L	1
21	90125-23	FIXED SHAFT	WA-14	2
22	90125-21	UPPER SHAFT	WA-14	1
23	90125-31	BEARING	#6202ZZ	2
<u>23                                    </u>	90125-68	UPPER WHEEL	#020222 WA-14	1
25	90125-14	TIRE	WA-14C	2
26	90125-14	HEX. NUT	1/2"	1
27 27	90125-39	DOOR CLIP MOUNTING POST	1/2	3
	90123-39	UPPER WHEEL HOUSING	BS3550PC	1
28 29	90140-05	UPPER COVER DOOR	BS3550PC	1
30	90125-47	DOOR KNOB	3/8"	3
			1/4" X 16m/m	4
31	90125-03	STEEL PIN		
32	90125-04	HEX. HEAD BOLT	3/4" X 2 1/2"	1
33	90125-05	FLAT WASHER	3/4" X 46 X 3T	2
34	90125-01	SAW BASE	WA-14CD	1
35	90125-15	FLAT WASHER	1/4" X 38	1
36	90125-69	BLADE	93 X X 0.65	1
37	90125-89	TABLE INSERT	BS3550PC	1
38	90125-91	TABLE ALIGNMENT PIN	WA-14	1
39	90125-88	TABLE	16" X 16"	1
10	90125-85	HEX. HEAD BOLT	M10 X 50L	2
41	90125-84	TRUNNION CLAMP SHOE	WA-14	2
42	90125-83	TRUNNION	WA-14	2
43	90125-16	HEX. HEAD BOLT	1/4" X 5/8"	7
14	90125-78	HEX. HEAD BOLT	5/16" X 1/4"	6
45	90125-74	TABLE-TILT BRACKET	WA-14C	1
46	90125-130	LOCK KNOB	M10	2
17	90140-07	LOCK WASHER	1/4"	6
48	90125-134	SCALE	BS3550PC	1
19	90125-76	TABLE STOP BOLT	5/16"X3"	1
50	90125-58	C-RING	S-10	2
51	90125-105	FLAT HEAD SCREW	3/16" X 3/8"	2
52	90125-75	HEX. NUT	5/16"	1
53	90125-72	HEX. HEAD BOLT	1/4" X 3/4"	2
	90125-71	FLAT WASHER	1/4" X 16	2

# PARTS LIST 90-140 M1

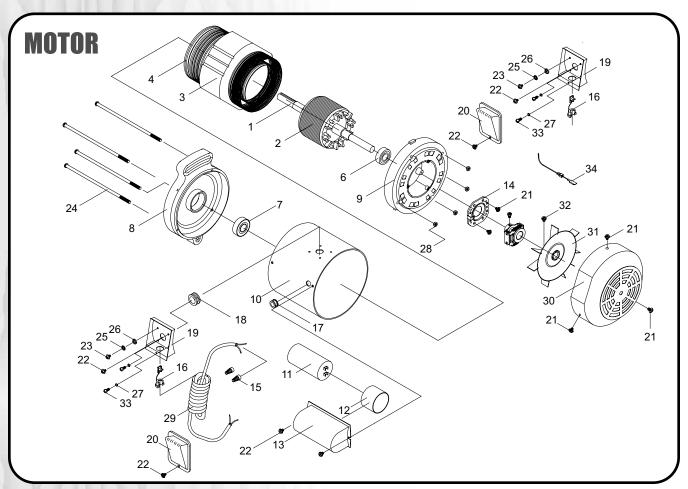
REF #	PART. NO.	DESCRIPTION	SPECIFICATION	OTV
KEF#	PARI. NO.	DESCRIPTION	SPECIFICATION	QH
55	90125-70	LOWER BLADE GUIDE HOLDER	WA-14	1
56	90125-55	SET SCREW	M6 X 10L	3
57	90125-43	DOOR HINGE	WA-14C	1
58	90125-67	PHILLIPS HEAD SCREW	3/16" X 3/8"	2
59	90125-118	STEEL PLATE		2
60	90125-119	FLANGE SCREW	3/16" X 3/8"	4
61	90125-164	POWER CORD HOOK		2
62	90125-45	LOCK WASHER	3/16"	16
63	90125-11	PULLEY	Ø180 – Ø168	
64	90125-78	HEX. BOLT	5/16" X 1-1/4"	4
65	90125-32	C RING	R34	2
66	90125-09	BEARING	6204ZZ	2
67	90125-13	LOWER WHEEL	WA-14	1
68	90125-113	SET SCREW	M6 X 16L	2
69	90140-08	LOWER DOOR	BS3550PC	1
70	90125-103	BLADE GUARD	WA-14	1
71	90125-18	BEARING COVER	EBS-12C	1
72	90125-67	SCREW	3/16" X 3/8"	6
73	90125-104	FLAT WASHER		2
74	90140-09	MOTOR I.D. PLATE	103 X 53	1
75	90140-10	GUARD SUPPORT	53.5 X 24 X 1.5T	1
76	90125-120	STRAIN RELIEF BUSHING	6N-4	2
77	90125-122	POWER CORD W/PLUG		
78	90125-77	FLAT WASHER	5/16" X 18 X 2T	8
79	90140-11	HEX. BOLT	1/4" X 1/4"	2
80	90125-99	DUST OUTLET	WA-14C	1
81	90125-111	KEY	5 X 5 X 30L	1
82	90125-108	HEX. HEAD BOLT	1/2" X 2-1/2"	1
83	90125-107	FLAT WASHER	1/2 //2 1/2	1
84	90140-12	MOTOR		1
85	90125-10	KEY	5 X 5 X 60L	1
86	90125-133	HEX. NUT	5/16"	4
87	90125-63	SET SCREW	M6 X 45L	2
88	90125-03	MOTOR PULLEY	Ø50-Ø76	1
89	90125-112	FLANGE SCREW	3/16" X 3/8"	2
	90125-117		3/10 X 3/6	
90 91	90125-116	SWITCH SPROCKET WASHER	M5	1 2
92		V BELT		1
93	90125-12		A-26 3/8"	1
93	90140-13	FLANGE NUT FLANGE SCREW	3/16" X 3/8"	
	90125-96			2
95	90140-14	WARNING LABEL	175 X 101.5	1
96	90125-62	THUMB SCREW	M6 X 16L	1
97	90125-95	ARM COVER (LOWER)	WA-14C	1
98	90140-15	FRAME COVER (UPPER)	WA-14C	1
99	90125-29	WING NUT	5/16"	1_
100	90125-90	TABLE INSERT PIN	Ø3X10L	1
101	90125-93	BRUSH	WA-14C	1
102	90125-08	LOWER SHAFT	WA-14CF	1_
103	90125-79	POINTER	MY-2000P	1
104	90125-82	SCALE		1_
105	90125-114	NYLON NUT	1/2"	1
106	90125-127	FLANGE SCREW	3/16" X 1/4"	2
107	90125-126	COPPER WASHER	M5	2
108	90125-38	MOUNTING POST		2
109	90125-165	FLANGE SCREW	3/16" X 1/2"	2

### PARTS LIST 90-140 M1

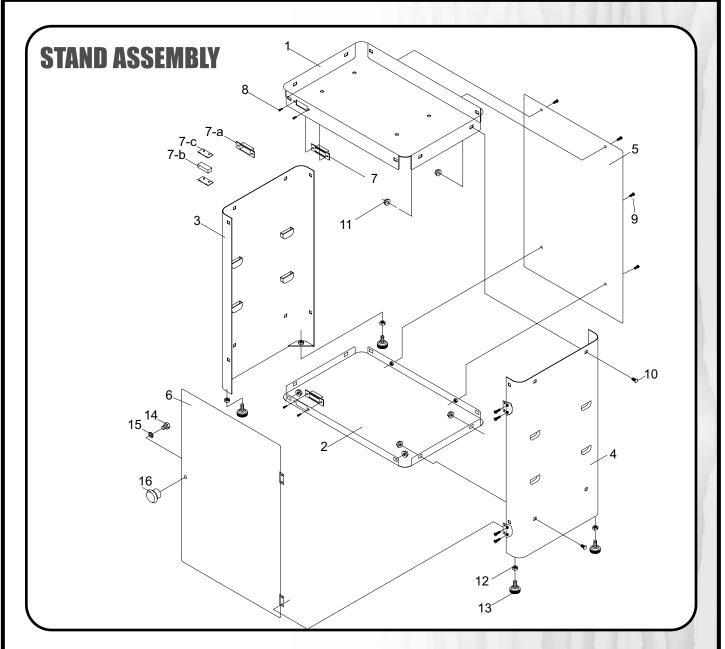
REF #	PART. NO.	DESCRIPTION	SPECIFICATION	QTY
110	90125-128	MITER GAUGE	BS3550PC	1
111	90140-16	BLADE GUIDE MOUNT	WA-14	2
112	90125-66	FLAT WASHER	3/16" X 14	2
113	90140-17	FLAT WASHER	1/4" X 13 X 1.5T	6
114	90125-53	SET SCREW	5/16 X 5/16"	1
115	90125-52	SPRING	SB-12A	1
116	90125-51	STEEL BALL	1/4"	1
117	90125-41	LOCK WASHER	3/16"	3
118	90125-92	BRUSH HOLDER	WA-14C	1
119	90140-18	WARNING LABEL		1
120	90125-102	DOOR CLIP MOUNTING POST	WA-14C	3
121	90125-94	FLANGE SCREW	3/16" X 3/8"	1
122	90125-100	FLAT WASHER	1/4" X 16	2
123	90125-73	BLADE GUIDE DUST PLATE	WA-14C	1
124	90125-40	DOOR CLIP	WA-14C	3
125	90125-42	SCREW	3/16" X 1/4"	3
126	90125-129	ALLEN KEY	3MM	1
127	90125-37	FLANGE SCREW	3/16" X 3/8"	2
128	90125-36	FLAT WASHER		2
129	90125-77	FLAT WASHER	5/16" X 18	2
130	90125-17	C RING	S-20	1
131	90125-44	FLANGE SCREW	3/16" X 1/4"	12
132	90140-19	SPRING PIN	Ø6 X 20L	1
133	90125-80	LOCK WASHER	M5	1
134	90125-67	SCREW	3/16" X 3/8"	1
135	90125-98	DOOR HINGE (LOWER)	WA-14C	1
136	90125-06	LOCK WASHER	3/4"	1
137	90125-07	HEX. NUT	3/4"	1
138	90125-109	FLAT WASHER		1
139	90125-110	RATCHET LEVER	3/8" X 45L	1
140	90140-20	PHILLIPS HEAD SCREW	M4 X 10L	1
141	90125-81	FLAT WASHER	3/8" X 19 X 2T	3
142	90140-21	FLAT WASHER	3/8" X 16 X 2T	2
143	90140-22	STAND	WA-14CF	1

## **NOTES**



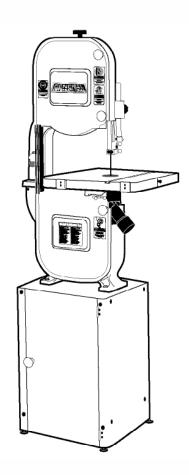


REF. #	PART NO.	DESCRIPTION SP	ECIFICATION O	ΣΤΥ
1	90140-23	SHAFT 95	X 50 X 282L X Ø14	
2	90125-106A-02	ROTOR	95 X 50 X Ø20	1
3	90140-24	STATOR	160 X 95 X 50	1
4	90140-25	COPPER WINDING	0.75(1.558KG)	1
6	90125-106A-06	BEARING	620277	1
7	90125-106A-07	BEARING	6203ZZ	1
8	90125-106A-08	FRONT MOTOR COVER	WA-14CD	1
9	90125-106A-09	REAR MOTOR COVER	WA-14CR	1
10	90125-106A-10	MOTOR HOUSING	160 X 135	1
11	90125-106A-11	CAPACITOR	300UF/125V	1
12	90125-106A-12	CAPACITOR TUBE		1
13	90125-106A-13	CAPACITOR COVER	400M	1
14	90125-106A-14	CENTRIFUGAL SWITCH SET	1/2HP 14MM	1
15	90125-106A-15	TERMINAL	73B	3
16	90125-106A-16	STRAIN RELIEF	6N-4	1
17	90125-106A-17	WIRE PROTECTOR	3/8 T	1
18	90125-106A-18	WIRE PROTECTOR	14MM X 3MM	1
19	90125-106A-19	LOWER COVER		1
20	90125-106A-20	UPPER COVER		1
21	90125-106A-21	FLANGE SCREW		5
22	90125-106A-22	FLANGE SCREW		4
23	90125-106A-23	FLANGE SCREW		1
24	90125-106A-24	FLANGE SCREW		4
25	90125-106A-25	SPROCKET WASHER		1
26	90125-106A-26	COPPER WASHER		1
27	90125-106A-27	LOCK WASHER		2
28	90125-106A-28	HEX. NUT		4
29	90140-26	POWER CORD		1
30	90140-27	MOTOR FAN COVER		1
31	90140-28	MOTOR FAN		1
32	90140-29	PHILLIPS HEAD SCREW		1
33	90140-30	PHILLIPS HEAD SCREW		2
34	90125-106A-30	WIRE		1



PART NO.	REF. NO.	DESCRIPTION	<b>SPECIFICATION</b>	QTY
1	90140-22-01	TOP PLATE		1
2	90140-22-02	TOOL TRAY		1
3	90140-22-03	LEFT SIDE PANEL		1
4	90140-22-04	RIGHT SIDE PANEL		1
5	90140-22-05	BACK PANEL		1
6	90140-22-06	DOOR		1
7	90140-22-07	MAGNETIC DOOR CATCH		2
7-A	90140-22-08	MAGNET HOUSING		2
7-B	90140-22-09	MAGNET		2
7-C	90140-22-10	PLATE		4
8	90140-22-11	SELF TAPPING SCREW	M3 X 12L	4
9	90140-22-12	PHILLIPS HEAD SCREW	3/16" X 3/8"	8
10	90140-22-13	CARRIAGE BOLT	5/16" X 1/2"	16
11	90140-22-14	FLANGE NUT	5/16"	16
12	90140-22-15	HEX. NUT	3/8"	4
13	90140-22-16	LEVELING FOOT	3/8" X 1"	4
14	90140-22-17	HEX HEAD BOLT	3/8" X 1/2"	1
15	90140-22-18	SPROCKET WASHER	3/8"	1
16	90140-22-19	DOOR KNOB	3/8"	1

### **MODEL 90-140 M1**





8360 Champ-d'Eau, Montreal (Quebec) Canada H1P 1Y3

Tel.: (514) 326-1161

Fax: (514) 326-5565 - Parts & Service / Fax: (514) 326-5555 - Order Desk

orderdesk@general.ca www.general.ca